1646

PATENT
ATTORNEY DOCKET NO.: REGEN1260-3

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Tsien et al.	Art Unit:	1646
Application No.:	10/057,505	Examiner:	Unassigned
Filed:	January 25, 2002		
Title:	TANDEM FLUORESCENT PROTEIN CONSTRUCTS		

Commissioner for Patents
Washington, D.C. 20231

TRANSMITTAL SHEET

Transmitted herewith for the above-identified application please find:

1. Information Disclosure Statement (2 pages);
2. Form PTO-1449 (8 pages);
3. Form PTO-892 (1 page);
4. A copy of the International Search Report dated April 27, 1998 (8 pages);
5. Return Receipt Postcard.

CERTIFICATION UNDER 37 CFR §1.8
I hereby certify that the documents referred to as enclosed herein are being deposited with the United States Postal Service as first class mail on this date, **January 30, 2003**, in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231.
Carrie E. Bickle *(Name of Person Mailing Paper)*
(Signature) **January 30, 2003** *(Date)*

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No fee is deemed necessary in connection with the filing of this Information Disclosure Statement, because it is being filed prior to the receipt of a first office action on the merits of the above-captioned application. However, if any fee is required, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 50-1355. A duplicate copy of this Transmittal sheet is enclosed.

Respectfully submitted,

Date: January 30, 2003

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INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with 37 C.F.R. § 1.97, Applicants bring to the Examiner's attention the related parent patent application, U.S. Serial No. 09/396,003 filed September 13, 1999, which is relied upon for an earlier filing date under 35 U.S.C. § 120.

Applicants respectfully request that the references supplied in compliance with 37 C.F.R. § 1.97 in the above-referenced parent application, as well as those cited during its examination, be made of record. For the convenience of the Examiner, enclosed are copies of Form PTO-1449, Form PTO-892 and a copy of the International Search Report listing the references

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Carrie E. Bickle *(Name of Person Mailing Paper)*
(Signature) **January 30, 2003** *(Date)*

cited by the Examiner or cited in an Information Disclosure Statement or from a communication from a foreign patent office. Copies of the documents will be found in the above-referenced parent application.

It is respectfully requested that the parent application and the references cited therein be considered in the examination of this application and that their consideration be made of written record in the application file.

No fee is deemed necessary in connection with the filing of this Information Disclosure Statement, because it is being filed prior to the receipt of a first office action on the merits of the above-captioned application. However, if any fee is required, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 50-1355. A duplicate copy of this Transmittal sheet is enclosed.

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Form PTO-1449 (REV. 8-83)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. REGEN1260-2 (AURO-002.02US)	SERIAL NO. 09/396,003
	INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	APPLICANT: Tsien et al.	
		FILING DATE: September 13, 1999	GROUP: 1655

U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE
		5,614,191	03/25/97	Puri et al.			

FOREIGN PATENT DOCUMENTS								
							TRANSLATION	
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
	F1	WO 91/01305	02/07/91	PCT				
	F2	WO 95/07463	03/16/95	PCT				
	F3	WO 95/21191	08/10/95	PCT				
	F4	WO 97/11094	03/27/97	PCT				
	F5	WO 97/28261	08/07/97	PCT				

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	D1	Ward et al.,An Energy transfer protein in coelenterate bioluminescence. Characterization of the Renilla green fluorescent protein. J. Biol. Chem. 254 no 3 (1979) 781-788
	D2	Geoghegan et al., Site directed double fluorescent tagging of human renin and collagenase (MMP-1) substrate peptides using the periodate oxidation of N-terminal serine. An apparently general strategy for provision of energy transfer substrates for proteases. Bioconjugate Chemistry 4 no 6, (1993) 537-544
	D3	Wu et al. Resonance energy transfer: Methods and applications. Analytical Biochemistry 218, 1194, p1-13 Academic press Inc., Duluth, NM
	D4	Inouye and Tsuji, Expression of the gene and fluorescence characteristics of the recombinant proteins. FEBS Letters 341:277-280 (1994)
	D5	Mitra et al., Fluorescence resonance energy transfer between blue emitting and red-shifted excitation derivatives of the green fluorescent protein. Gene, 173:13-17 (1996)

EXAMINER	DATE CONSIDERED

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformation and not considered. Include a copy of this form with the next communication to applicant.

SUBSTITUTE FORM PTO-1449 (MODIFIED)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 07257/041001	SERIAL NO. 08/792,553
	INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)	APPLICANT: Tsien *et al.*	
(37 CFR 1.98(b))		FILING DATE January 31, 1997	GROUP 1801

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO
	F1	WO 94/28166	8/12/94	PCT	C12Q 1	37		

OTHER DOCUMENTS (including Author, Title, Date, Place of Publication)

	D1	Inouye and Tsuji, "Expression of the gene and fluorescence characteristics of the recombinant protein," *FEBS Letters 341:* 277-280 (1994)

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Form PTO-1449 (REV. 8-83)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 07257/041001 (AURO-002.01US)	SERIAL NO. 08/792,553
	INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	APPLICANT: Tsien et al.	
		FILING DATE: January 31, 1997	GROUP: 1815

U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	P1						

FOREIGN PATENT DOCUMENTS								
							TRANSLATION	
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
	F1							

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	D1	Guiliano et al., Fluorescent Protein Biosensors: Measurement of Molecular Dynamics in Living Cells, Annual Review of Biophysics and Biomolecular Structure, 24:405 (1995).

EXAMINER	DATE CONSIDERED

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	INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	APPLICANT: Tsien et al.	
		FILING DATE: January 31, 1997	GROUP: 1815

U.S. PATENT DOCUMENTS							
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	P1						

FOREIGN PATENT DOCUMENTS								
							TRANSLATION	
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
	F1							

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	D1	Roth, Thesis from the Graduate Program in Biochemistry from Rutgers, the State University of New Jersey (October 1985)

EXAMINER	DATE CONSIDERED

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SUBSTITUTE FORM PTO-1449 (MODIFIED)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.	SERIAL NO.
07257/041001	08/792,553
APPLICANT: Roger Y. Tsien et al.	
FILING DATE 01/31/97	GROUP 1815

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Use several sheets if necessary)

(37 CFR 1.98(b))

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EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
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	AB	5,264,563	11/23/93	Huse			
	AC	5,625,048	04/29/97	Tsien et al.			
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	AE	5,602,021	02/11/97	Davis et al.			
	AF	5,599,690	02/04/97	Dasmahapatra			
	AG	5,605,809	02/25/97	Komoriya et al.			

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO
	AH	WO 94/28173	12/08/94	PCT				
	AI	WO 96/13607	05/09/96	PCT				
	AJ	WO 94/28166	12/08/94	PCT				
	AK	WO 96/23810	08/08/96	PCT				
	AL	WO 96/23898	08/08/96	PCT				
	AM	WO 96/27675	09/12/96	PCT				
	AN	WO 96/27027	09/06/96	PCT				
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	AP	Cody et al., "Chemical Structure of the Hexapeptide Chromophore of the *Aequorea* Green-Fluorescent Protein", Biochemistry, 1993, 32, pp. 1212-1218
	AQ	Ward et al., "Reversible Denaturation of *Aequorea* Green-Fluorescent Protein: Physical Separation and Characterization of the Renatured Protein," Biochemistry, 1982, 21, pp. 4535-4540
	AR	Surpin et al., "Reversible Denaturation of *Aequorea* Green Fluorescent Protein-Thiol Requirement," Photochem. Photobiol., 49, Abstract, 25S (1989)
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	AT	Ward, "Properties of the Coelenterate Green-Fluorescent Proteins", Bioluminescence and Chemiluminescence, (eds. DeLuca, M.A. & McElroy, W.D.) 235-242 (Academic Press, New York 1981)

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	AU	Ehrig et al., "Green-fluorescent protein mutants with altered fluorescence excitation spectra", (1995) FEBS Letters, 367(2) pp. 163-166
	AV	Delagrave et al., "Red-Shifted Excitation Mutants of the Green Fluorescent Protein", Bio/Technology, 13:151-154 (1995)
	AW	Kain et al., "Green Fluorescent Protein as a Reporter of Gene Expression and Protein Localization," BioTechniques, 19(4): pp. 650-655 (1995)
	AX	Cubitt et al., "Understanding, improving and using green fluorescent proteins, TIBS, (1995) 20:448-455
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	BA	Colbran et al., "A Phenylalanine in Peptide Substrates Provides for Selectivity between cGMP- and cAMP-dependent Protein Kinases," J. Biol. Chem., 267:9589-9594 (1992)
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	BE	Cheng et al., "Use of green fluorescent protein variants to monitor gene transfer and expression in mammalian cells," Nature Biotechnology, 14:606-609 (1996)
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	BG	Yaron et al., "Intramolecularly Quenched Fluorogenic Substrates for Hydrolytic Enzymes," Analytical Biochemistry, 95, 228-235 1979
	BH	L. Stryer, "Fluorescence Energy Transfer As A Spectroscopic Ruler," Ann. Rev. Biochem., 1978, 47:819-46
	BI	Ward et al., "Spectral Perturbations of the *Aequorea* Green-Fluorescent Protein, Photochem. Photobiol., 1982, 35:803-808

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	BJ	Levine et al., "Isolation and Characterization of a Photoprotein, "Phialidin", and a Spectrally Unique Green-Fluorescent Protein from the Bioluminescent Jellyfish *Phialidium Gregarium*", Comp. Biochem. Physiol., 1982, 72B:77-85
	BK	Matayoshi et al., "Novel Fluorogenic Substrates for Assaying Retroviral Proteases by Resonance Energy Transfer", Science, 1990, 247:954
	BL	Baldwin et al., "Cloning and Expression of the luxY Gene from Vibrio fischeri Strain Y-1 in Escherichia coli and Complete Amino Acid Sequence of the Yellow Fluorescent Protein," Biochemistry, 1990, 29:5509-15
	BM	Blondel et al., "Engineering the quaternary structure of an exported protein with a leucine zipper," Protein Engineering, 1991, 4:457-461
	BN	Prasher et al., "Primary Structure of the *Aequorea victoria* green-fluorescent protein," Gene, 1992, 111:229-233
	BO	Tsien et al., "FRET for studying intracellular signalling," Trends Cell Biol, 1993, 3:242-245
	BP	Wilbanks et al., "Rod Structure of a Phycoerythrin II-containing Phycobilisome," J. Biol. Chem., 1993, 268:1226-35
	BQ	Dunn et al., "Subsite Preference of Retroviral Proteinase," Meth. Enzymol., 1994, 241:254
	BR	Hardy et al., "Amyloid Protein Percursor in Development, Aging, and Alzheimer's Disease," ed., C.L. Masters et al., pp. 190-198
	BS	Norris et al., "Nucleotide sequence of a cDNA clone encoding the precursor of the peridinin-chlorophyll a-binding protein from the dinoflagellate symbiodinium sp.." Plant Molecular Biology, 1994, 24:673-77
	BT	Krafft et al., "Synthetic approaches to continuous assays of retroviral proteases," Methods Enzymol., 1994, 241:70-86
	BU	Heim et al., "Wavelength mutations and posttranslational autoxidation of green fluorescent protein," Proc Natl Acad Sci, USA, 1994, 91:12501-12504
	BV	Chalfie et al., "Green Fluorescent Protein as a Marker for Gene Expression," Science, 1994, 263:802-805
	BW	Seidah et al., "Pro-Protein Convertases of Subtilisin/Kexin Family," Meth. Enzymol., 1994, 244:175
	BX	Smith et al., "Purification and Kinetic Characterization of Human Cytomegalovirus Assemblin.," Meth. Enzymol., 1994, 244:412
	BY	Thornberry, "Interleukin-1β Converting Enzyme," Meth. Enzymol., 1994, 244:615
	BZ	Bouvier et al., "Leishmanolysin: Surface Metalloproteinase of Leishmania," Meth. Enzymol., 1995, 248:614

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SUBSTITUTE FORM PTO-1449 (MODIFIED)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 07257/041001	SERIAL NO. 08/792,553
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•								

OTHER DOCUMENTS (including Author, Title, Date, Place of Publication)

	CA	Cubitt et al., "Understanding, improving and using green fluorescent proteins," Trends Biochem Sci, 1995, in press:
	CB	Deschamps et al., "Rapid Purification of Recombinant Green Fluorescent Protein Using the Hydrophobic Properties of an HPLC Size-Exclusion Column," Protein Expression and Purification, 1995, 6:555-558
	CC	Heim et al., "Improved green fluorescence," Nature, 1995, 373:663-664
	CD	Knight, "Fluorimetric assays of proteolytic enzymes," Methods Enzymol, 1995, 248:18-34

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33456

Notice of References Cited

Application/Control No.	Applicant(s)/Patent Under Reexamination	
09/396,003	TSIEN ET AL.	
Examiner	Art Unit	Page 1 of 1
Bradley L. Sisson	1655	

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification	
*	A	US-5981200-	11-1999	Tsien et al.	435	7.4
	B	US- -				
	C	US- -				
	D	US- -				
	E	US- -				
	F	US- -				
	G	US- -				
	H	US- -				
	I	US- -				
	J	US- -				
	K	US- -				
	L	US- -				
	M	US- -				

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N	- -				
	O	- -				
	P	- -				
	Q	- -				
	R	- -				
	S	- -				
	T	- -				

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.